

REMARKS

Pending in the application are claims 1 – 27 and 44-52 of which claims 1, 25-27, 44, 45 and 50 are independent. The following comments address all stated grounds of rejection. In view of these comments, the Applicants respectfully urge reconsideration of the outstanding rejections and passage of the claims to allowance.

I. Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3, 4, 6-20, 24-27 and 44-49 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,437,856 of Valli (the '856 patent). Applicants respectfully traverse this rejection.

The claimed invention is directed to a radially expandable fluid delivery device, an expandable drug delivery device (in claim 25) or a medical treatment device (in claim 44). The claimed invention includes a wall or a layer (in claim 45) formed of *a microstructure of nodes interconnected by fibrils*. The microstructure forms *micro-channels for a fluid to permeate through the wall*. The nodes are oriented such that spaces between the nodes form generally aligned micro-channels extending from the inner surface to the outer surface of the wall.

In comparison, the '856 patent discloses a peritoneal catheter device for dialysis which includes a rigid catheter (2) and a membrane (11) arranged around the catheter. The membrane is substantially impermeable and has holes (11') for the passage of the

dialysis liquid. (See column 3, lines 12-14) The number and diameters of the holes may be selected such that the dialyzing liquid creates a sufficient pressure to expand the membrane. Alternatively, the membrane is of semipermeable material without visible perforations as shown in FIG. 5.

Applicants respectfully submit that the cited reference fails to disclose a wall or a layer formed of *a microstructure of nodes interconnected by fibrils*. The present application describes an example of the microstructure in FIG. 8, which depicts nodes (130) interconnected by fibrils (132) and generally aligned with one another. In this example, the nodes are generally oriented perpendicular to the longitudinal axis (114) of the tube (110) and substantially all of the nodes (130) extend along a transverse axis (134) from an inner surface (136) to an outer surface (138) of the tube (110). In contrast, the '856 patent discloses an impermeable membrane (11) with holes (11') or alternatively a semipermeable membrane without holes. The Examiner asserts that the area between the orifices (11') constitutes the nodes. Applicants respectfully disagree. The Examiner's assertion leads to a conclusion that nodes are connected by the holes. The claimed invention, however, recites that the nodes are interconnected by fibrils, not by holes. Therefore, Applicants respectfully submit that the cited reference fails to disclose a microstructure of nodes interconnected by fibrils.

Additionally, Applicants respectfully submit that the cited reference fails to disclose *micro-channels* formed by the microstructure of nodes interconnected by fibrils. As depicted in FIG. 8 of the present application, the microstructure of nodes (130)

interconnected by fibrils (132) provides micro-channels (134) extending entirely from the inner wall (136) and the outer wall (138) of the tube (110). The Examiner indicates that the holes (11') disclosed in the cited reference correspond to the micro-channels of the claimed invention. Applicants respectfully disagree. *The micro-channels of the claimed invention are formed by a microstructure of nodes interconnected by fibrils.* Without the disclosure of a microstructure of nodes interconnected by fibrils, the holes disclosed in the '856 can't be micro-channels formed by the microstructure of nodes. Therefore, Applicants respectfully submit that the cited reference fails to disclose micro-channels.

In light of these arguments, Applicants respectfully submit that the cited prior art of the '856 patent fails to anticipate each essential element of independent claims 1, 25-27, 44 and 45. Applicants therefore request the withdrawal of the Examiner's rejection of claims 1, 3, 4, 6-20 and 24-27 and 44-49 under 35 U.S.C. 102(b) in lieu of the cited prior art of the '856 patent.

II. Claim rejections under 35 U.S.C. §103

A. Claims 25-27 and 44 in light of Valli and Butler et al.

Claims 25-27 and 44 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,437,856 of Valli (the '856 patent) in view of U.S. Patent No. 5,843,069 of Butler et al. (the '069 patent). Applicants respectfully submit that claims 25-27 and 44 are not obvious in view of the '856 patent and the '069 patent.

Applicants respectfully submit that the '856 patent and the '069 patent fails to teach or suggest all of the claim elements of claims 25-27 and 44. Independent claims 25-27 and 44 recite the microstructure of nodes interconnected by fibrils and the micro-channels formed by the microstructure. The '856 patent fails to teach or suggest these limitations. Applicants submit that the '069 patent also fails to teach or suggest the limitations. The '069 patent has been cited in relation to the disclosure of a fluoropolymer material and fails to teach the microstructure of nodes interconnected by fibrils and the micro-channels formed by the microstructure. Therefore, Applicants respectfully submit that claims 25-27 and 44 are not obvious in light of the '856 patent and the '069 patent.

B. Claims 5, 21-23 and 50-52 in light of Valli

Claims 5, 21-23 and 50-52 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,437,856 of Valli (the '856 patent). Applicants respectfully submit that claims 5, 21-23 and 50-52 are not obvious in light of the '856 patent.

Applicants respectfully submit that the '856 patent fails to teach or suggest the microstructure of nodes interconnected by fibrils and the micro-channels formed by the microstructure, as recited in claim 1. Claims 5 and 21-23, which depend from claim 1, are not rendered obvious in light of the '856 patent. Applicants therefore submit that claims 5 and 21-23 are in condition for allowance.

Independent claim 50 also recites micro-channels formed by the microstructure of nodes interconnected by fibrils. Applicants respectfully submit that the '856 patent fails to teach or suggest all of the claim elements of claim 50. Claims 51-52, which depend from independent claim 50, are not rendered obvious in light of the '856 patent. Applicants therefore submit that claims 50-52 are in condition for allowance.

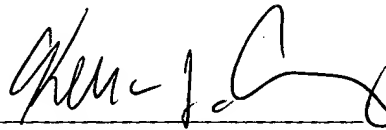
Conclusion

In light of the aforementioned arguments, Applicants contend that each of the Examiners rejections have been adequately addressed and the pending application is in condition for allowance.

Should the Examiner feel that a telephone conference with Applicants' attorney would expedite prosecution of this application, the Examiner is urged to contact the Applicants' attorney at (617) 227-7400.

Respectfully submitted,

LAHIVE & COCKFIELD, LLP



Kevin J. Canning, Esq.
Registration No. 35,470
Attorney for Applicants

28 State Street
Boston, MA 02109
(617) 227-7400
Dated: January 6, 2003